

ABSTRACT

CV. Samson Jaya Utama is a factory engaged in the production of paving blocks. In the period 2018 – 2019, CV. Samson Jaya Utama has decreased the amount of production and in 2019 the amount of production did not reach the company's production target. This is due to the high frequency of damage to the paving machine in CV. Samson Jaya Utama. The high frequency of damage is due to maintenance activities in the company not considering the characteristics of the damage. To support the paving machine to work according to its function, the company must carry out maintenance activities that consider the characteristics of the damage. Therefore, this study uses the method of Reliability and Risk Centered Maintenance (RRCM). The purpose of this study was to determine the optimal maintenance policy proposal and its maintenance costs. In determining the critical components, this study used a Risk Priority Number and selected three components, namely st 37 iron plate, pillow block, and trusco rubber. By using the RRCM method, the proposed maintenance task and total maintenance costs are obtained. Based on the results of data processing, obtained 4 proposed maintenance tasks with three schedule on condition tasks and one schedule discard task. For the schedule on-condition task, the metal plate components are maintained at intervals of once every 9 weeks. Then for the schedule on-condition task for the pillow block component, greasing is carried out at intervals of 14 weeks, while for the schedule on-condition task for the trusco rubber component, maintenance is carried out at intervals of once every 10 weeks. For the schedule discard task, replacement of pillow block components is carried out at intervals of once every 23 weeks. The total cost of the proposed maintenance is Rp. 25,011,299,- per year, which is Rp. 13,385,377 less than the total cost of existing maintenance per year.

Keywords: Maintenance, Reliability and Risk Centered Maintenance, Maintenance Interval